REMARKS

Claims 1-16 are pending in the present application. Claims 1-6, 9, 12, and 16 stand rejected under 35 U.S.C. § 102 and claims 7, 8, 10, 11, and 13-15 stand rejected under 35 U.S.C. § 103. Claims 1, 2, 4, 6, and 9 have been amended. Applicants respectfully request reconsideration of the claims 1-16 in view of the foregoing amendments and following remarks.

Telephone Interview

Applicants would like to express their appreciation to Examiners Rovnak and Apley for participating in a telephone interview with Applicants on Monday, June 9, 1997. During the interview, Applicants and the Examiners discussed the differences between the claimed invention and the prior art. The Examiners indicated that the discussed amendments to at least Claims 1, 6 and 9 (which amendments have been incorporated herein) appeared to distinguish those claims over the art of record. As explained hereinafter, the remaining claims discussed during the interview have either been amended herewith, or otherwise distinguished as set forth below, such that it is believed that each of the pending claims presents patentable subject matter.

Amendments to Claims

Claims 1, 6, and 9 have been amended herewith to more particularly point out and distinctly claim the invention. As amended, these claims recite that the objects actively emit signals that include encoded information. This encoded information is detected by sensors in the board of the present invention to indicate the identity of the object. This is fully described in the written specification: "the chip emits the character identification signal including encoded information uniquely representative of the character on the block." (page 7, lines 3-6). Thus, no new matter has been added.

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Claims 2 and 4 have been amended to recite "the computer capable of providing visual feedback of the data detected from the objects placed on the surface." As illustrated in Figure 1 and described in the specification, the computer detects the data associated with the objects and displays it on the computer screen. Thus, again, no new matter has been added.

Anticipation Of Claims Under 35 U.S.C. § 102

With the foregoing amendments, Applicants respectfully traverse the rejection of claims 1-6, 9, 12, and 16 under 35 U.S.C. § 102 as being anticipated by United States Patent 5,188,368 to Ryan ("Ryan").

Claims 1, 6, and 9, as amended, all recited in one form or another "an emitter for actively emitting a signal including encoded information." Ryan does not anticipate or render obvious these claims because Ryan simply does not teach an emitter within an object for actively emitting a signal, let alone a signal including encoded information. Instead, Ryan discloses a "resonator" within a chess piece. (col. 6, lines 3-6). The resonator consists of a capacitor mounted in parallel with a coil 16 wrapped around a ferrite core 14 to "form a circuit having a natural resonant frequency." (col. 5, lines 45-50).

A resonator is not an emitter and does not emit a signal. A resonator is a passive device. As Ryan discloses, the resonator oscillates at a characteristic resonant frequency: "Each playing piece 10 or each rank of playing piece has a unique resonant circuit and hence resonant frequency, by which it can be identified." (col. 15, lines 50-52). Thus, Ryan's resonators are not emitting a signal. It has an inherent characteristic that is detected. In contrast, an emitter actively sends out signals. This fundamental difference between resonators and emitters demonstrates that Ryan, alone or in combination with other references, does not anticipate or render obvious the claims.

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These amendments further distinguish the claimed invention over the apparatus disclosed in Ryan. As amended, the claims specify that the emitted signals "include encoded information." Again, there is no teaching or suggestion in Ryan to encode information. Rather, the resonators of Ryan merely oscillate a specified frequency.

Claims 2-4, as amended, now recite that the computer is "capable of providing visual feedback of the data detected from the object placed on the surface." Ryan provides no visual feedback to the user of the identity of the chess piece. While United States Patent 5,088,928 to Chan ("Chan") does have the capability to provide visual feedback, this capability is severely limited. Chan has no capability to detect the identity of a plurality of objects placed on its touch pad 2 and thereafter display that information. Instead, Chan's computer can merely display moves in text or graphic display (col. 8, lines 41-50).

Claim 16 recites an apparatus including "one or more detectors capable of detecting the at least one unique item of data associated with the object regardless of where the object is placed on the surface." Ryan does not allow detection of the identity of its chess pieces regardless of where the pieces are placed on the board. Rather, there is a distinct number of chess piece positions. This is made clear by Ryan: "A resonant signal is therefore obtained if a playing piece is positioned on a particular discrete board position." If the chess piece is not positioned on the particular discrete board position, the resonant signal is not obtained and the chess piece is not properly identified.

Obviousness Of Claims Under 35 U.S.C. § 103

The Examiner has rejected claims 7, 8, 10, and 11 under 35 U.S.C. § 103(a) as being unpatentable over Ryan in view of Foley. Claims 7 and 8 depend on claim 1, and claims 10 and 11 depend on claim 9. Applicants have demonstrated above that Ryan does not disclose *inter alia*

"an emitter for actively emitting a signal including encoded information." All of these claims, therefore, are patentably distinct from Ryan. The educational device of Foley adds nothing to Ryan in this regard.
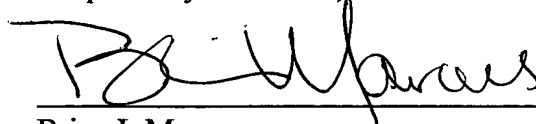
Similarly, the Examiner has rejected claims 13-15 under 35 U.S.C. § 103(a) as being unpatentable over Ryan in view of Chan. Claims 13-15 all ultimately depend on amended claim 9 which specifically recites "an emitter capable of actively emitting a signal including encoded information representative of said character." Applicants have demonstrated above that Ryan fails to teach or suggest an apparatus with this feature. Chan also adds nothing to Ryan in this regard.

Thus, at least for the reasons set forth above regarding Ryan, claims 7, 8, 10, 11, and 13-15 are patentable over the prior art.

Conclusion

It is respectfully asserted that no combination of the cited references teach or suggest the subject matter of the present invention. In light of the foregoing amendments and remarks, favorable reconsideration and allowance of claims 1-16 are respectfully requested.

Respectfully submitted,

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